

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

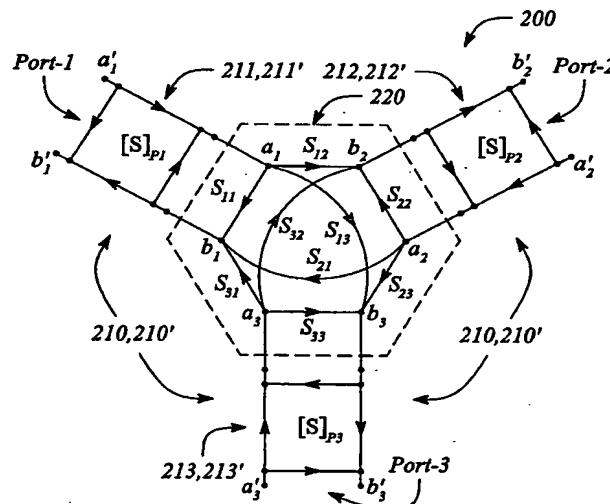
PCT

(10) International Publication Number
WO 2004/111768 A2

- (51) International Patent Classification⁷: G06F (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/US2004/017250
- (22) International Filing Date: 1 June 2004 (01.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/478,034 11 June 2003 (11.06.2003) US
- (71) Applicant (for all designated States except US): AGILENT TECHNOLOGIES, INC. [US/US]; 395 Page Mill Road, Palo Alto, CA 94306-2024 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DUNSMORE, Joel, P. [US/US]; 3151 Elisa Anne Way, Sebastopol, CA 95472 (US). BETTS, Loren, C. [US/US]; 5728 Dorian Drive, Rohnert Park, CA 94928 (US).
- (74) Agent: IMPERATO, John, L.; Agilent Technologies, Inc., Intellectual Property Administration, MS DL-429, P.O. Box 7599, Loveland, CO 95037-0599 (US).
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: CORRECTING TEST SYSTEM CALIBRATION AND TRANSFORMING DEVICE MEASUREMENTS WHEN USING MULTIPLE TEST FIXTURES



(57) Abstract: A test system and methods using the test system correlate measurements of a device under test (DUT) regardless of which test fixture is used for in-fixture testing of the DUT. The test system includes test equipment, a test fixture that interfaces the DUT to the test equipment, a computer and a computer program executed by the computer. The computer program includes instructions that implement determining a port-specific difference array for test fixtures used with the test system. The difference array describes a difference between the test fixtures at a corresponding test port thereof. The method includes determining the difference array, measuring a performance of the DUT in a second test fixture, and applying the difference array such that the measured performance approximates a hypothetical DUT performance for the DUT as if mounted in a first test fixture.